

Abstract

Disclosed is a high damage tolerant Al-Cu alloy of the AA2000 series having a high toughness and an improved fatigue crack growth resistance, including the following composition (in weight percent) Cu 3.8 - 4.7, Mg 1.0 - 1.6, Zr 0.06 - 0.18, Cr < 0.15, Mn > 0 - 0.50 , Fe \leq 0.15, Si \leq 0.15, and Mn-containing dispersoids, the balance essentially aluminum and incidental elements and impurities, wherein the Mn-containing dispersoids are at least partially replaced by Zr-containing dispersoids. There is also disclosed a method for producing a rolled high damage tolerant Al-Cu alloy product having a high toughness and an improved fatigue crack growth resistance, and applications of that product as a structural member of an aircraft.